BRUHAT BANGALORE MAHANAGARA PALIKE

Name of Work : Construction of Garadi Mane at Nisarga Gruond, Yelahanka 4th phase in Someshwra ward no-03 of yelahanka Satellite town sub division

Estimate Cost 3000000.00

Sl No	Description of Item	Unit	No	L	B	D	Qty	Rate	Amount
1	Earth work excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils . as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work. Depth exceeding 1.5m, but not exceeding 3 m (PWD SR 2021-22 Vol -I Pg 5 item No. 1.4.2)								
	Footings								
		Cum	10	3.00	3.00	1.80	162.00		
	SSM Footing								
	Along long direction	Cum	2	4.15	0.60	0.75	3.74		
	Along Short direction	Cum	2	6.10	0.60	0.75	5.49		
	Basic rate							199.00	
	Area weightage 10%							19.9	
	Total						**171.23**	**218.9**	**37481.15**
2	Providing and Filling in foundation with granite / trap broken metal 100mm. and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift, complete as per specifications. Specification No. (PWD SR 2021-22 Vol -2 CORRIGENDA.item No. 6.4)								
	Footings								
		Cum	10	3	3	0.10	9.00		
	Basic rate							2561.00	
	Basic rate							256.10	
	Total						**9.00**	**2817.1**	**25353.90**
3	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. Mix 1:3:6 (M10) Using 40 mm nominal size graded crushed coarse aggregates.Specification (PWD SR 2021-22 Vol -I Pg 15 item no 2.1.3)								
	Footings								
		Cum	10	3	3	0.15	13.50		
	SSM Below								
	Along long direction	Cum	2	14.65	0.6	0.15	2.64		
	Along Short direction	Cum	2	8.2	0.6	0.15	1.48		
	Basic rate							5554.00	
	Area weightage 10%							555.4	
	Total						**17.61**	**6109.40**	**107604.86**
4	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) Mix 1:2:4 (M15) Using 20 mm nominal size graded crushed coarse aggregates (PWD SR 2021-22 Vol -I Pg 15 item no 2.1.3)								
	SSM Above								
	Along long direction	Cum	2	14.65	0.60	0.1	1.76		

Sl No	Description of Item	Unit	No	L	B	D	Qty	Rate	Amount
	Along Short direction	Cum	2	8.2	0.60	0.1	0.98		
	Basic rate							6096.00	
	Area weightage 10%							609.6	
	Total						**2.74**	**6705.60**	**18386.76**
5	Providing Size Stone masonry with hard stone in foundation & plinth with Cement mortar 1:6 (1 cement : 6 coarse sand) (Vol 2/ P No-9/ I no- 5.4 of PWD SR 2021-22)								
	SSM								
	Along long direction	Cum	2	14.65	0.6	0.6	10.55		
	Along Short direction	Cum	2	8.2	0.6	0.6	5.90		
	Basic rate							5352.00	
	Area weightage 10%							535.2	
	Total						**16.45**	**5887.2**	**96856.21**
6	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations and other similar works etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m. ((PWD SR 2021-22 Vol- 1 P.No -7 / I.No -1.9)								
	Filling Available of Excavated Earth								
	Earth Work Excavation	Cum	From Item No. 1				171.23		
	PCC for Footing	Cum	From Item No. 3&4				-20.36		
	Filling in foundation with granite / trap broken metal	Cum	From Item No. 2				-9.00		
	SSM Footing	Cum	From Item No. 5				-16.45		
	Footing Concrete Quantity	Cum	From Item No. 9				-54.00		
	Basic rate							204.00	
	Area weightage 10%							20.4	
	Total						**71.42**	**224.40**	**16026.20**
7	**Loading and Unloading of Stone Boulder**/Stone aggregates/ Sand/Kankar/Moorum. (Tipper 14 m3) (PWD SR 2021-22 Vol-III Page No.3, Item No.1.1C)								
	Excavated Earth	Cum					171.23		
	Filling Available of Excavated Earth						-71.42		
	Basic rate							74.00	
	Area weightage 10%							**7.40**	
	Total						**99.81**	**81.40**	**8124.29**
8	Cost of Haulage Excluding Loading and Unloading Taking output 10 t load and lead 10 km = 100 t.km (PWD SR 2021-22 Vol-III Page No.3, Item No.1.4A)								
		t.Km		99.81		1.280	127.75296		
	Basic rate							**12.00**	
	8Km 12*8							**96.00**	
	Area weightage 10%							**9.60**	
	Total						**127.75**	**105.60**	**13490.71**

Sl No	Description of Item	Unit	No	L	B	D	Qty	Rate	Amount
9	Providing and laying in position Reinforced cement concrete for all **Sub structures of building,** Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/ trap/ basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) **M25** Design Mix Using 20 mm nominal size graded crushed coarse aggregates (Vol 2/ P No-17/ I no- 2.4.3 of PWD SR 2021-22)									
	Footings									
		Cum	10	3	3	0.6	54.00		
	Column below plinth								
		Cum	10	0.3	0.45	0.40	0.54		
	Plint Beam								
		Cum	3	14.65	0.2	0.45	3.96		
		Cum	2	8.2	0.2	0.45	1.48		
	Basic rate							5992.00	
	Add 8% For Shuttering							479.36	
	Sub Total							**6471.36**	
	Area weightage 10%							647.14	
	Total						**59.97**	**7118.50**	**426906.88**
10	Providing and laying in position Reinforced cement concrete for all **Super structures of building** , Road works, Water works, Irrigation works & super structure works of bridges upto 3.50 m height. The granite/ trap/ basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers laid in layers, well compacted using needle vibrators. The cost includes all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement, dowel bars & formwork to be paid separately) **M25 Design Mix** Using 20 mm nominal size graded crushed coarse aggregates (Vol 2/ P No-17/ I no- 2.5.2 of PWD SR 2021-22)									
	Ground Floor									
	Columns upto beam bottom									
		Cum	10	0.3	0.45	2.85	3.85		
	Basic rate							6186.00	
	Add 10% for Shuttering							618.60	
	Sub total							6804.60	
	Area weightage 10%							680.46	
	Total						**3.85**	**7485.06**	**28798.77**
	Ground Floor								
	Slab	Cum	1	16.15	9.1	0.15	22.04		
	Slab Above toilet	Cum	1	3.60	1.00	0.15	0.54		
	Basic rate							6186.00	
	Add 20% for Shuttering							1237.20	
	Sub total							7423.20	
	Area weightage 10%							742.32	
	Total						**22.58**	**8165.52**	**184416.23**
	Beams								
	Along long direction	Cum	2	14.65	0.30	0.6	5.27		
	Along Short direction	Cum	5	8.20	0.30	0.6	7.38		
	Basic rate							6186.00	
	Add 20% for Shuttering							1237.20	
	Sub total							7423.20	

Sl No	Description of Item	Unit	No	L	B	D	Qty	Rate	Amount
	Area weightage 10%							742.32	
	Total						**12.65**	**8165.52**	**103326.49**
	Lintel								
	Along long direction	Cum	2	14.65	0.2	0.2	1.17		
		Cum	3	3.00	0.1	0.2	0.18		
	Along Short direction	Cum	3	8.20	0.2	0.2	0.98		
		Cum	3	0.90	0.1	0.20	0.05		
	Basic rate							6186.00	
	Add 20% for Shuttering							1237.20	
	Sub total							7423.20	
	Area weightage 10%							742.32	
	Total						**2.39**	**8165.52**	**19515.59**
	Chejja	Cum	8.00	1.20	0.30	0.10	0.29		
	Basic rate							6186.00	
	Add 45% for Shuttering							2783.70	
	Sub total							8969.70	
	Area weightage 10%							896.97	
	Total						**0.29**	**9866.67**	**2841.60**
11	Providing Thermo-Mechanically Treated bars of grade Fe-550 Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position, binding and anchoring to adjacent members whereever necessary complete as per Design including cost of material, labour, usage charges complete as per specifications. (The laps and wastages shall not be measured separately) (Vol- 1 P.No. 84/I.No. 11.32 of PWD SR 2021-22 1st Corrigenda)								
	Ground Floor								
	Footing	Cum	Concrete Quantity				54.00		
		kg	Steel assumed 100 Kg/Cum of Concrete				5400.0		
	Column	Cum	Concrete Quantity				4.39		
		kg	Steel assumed 130 Kg/Cum of Concrete				570.38		
	Beam	Cum	Concrete Quantity				18.09		
		kg	Steel assumed 120 Kg/Cum of Concrete				2170.3		
	Roof Slab	Cum	Concrete Quantity				22.58		
		kg	Steel assumed 100 Kg/Cum of Concrete				2258.5		
	Lintel	Cum	Concrete Quantity				2.39		
		kg	Steel assumed 100 Kg/Cum of Concrete				239.0		
	Chejja	Cum	Concrete Quantity				0.29		
		kg	Steel assumed 100 Kg/Cum of Concrete				28.8		
	Basic rate							96.00	
	Area weightage 10%							9.60	
	Total						**10055.91**	**105.6**	**1061904.10**

Sl No	Description of Item	Unit	No	L	B	D	Qty	Rate	Amount
12	Providing and constructing load bearing wall with Solid Concrete blocks of size 400x200x200mm having block density more than 1800kg/m3 and minimum compressive strength of 4.00 N/mm2 conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials, labour, scaffolding and curing, usage charges of machinery etc complete as per specifications. (Vol 2/ P No-17/ I no- 6.32 of PWD SR 2021-22)								
	Ground Floor								
	Along long direction	Sqm	2	16.15		2.65	85.60		
	Along Short direction	Sqm	3	7.9		2.65	62.81		
	Deduction								
	D1	Sqm	-4	2.1		2.40	-20.16		
	D2	Sqm	-1	0.9		2.10	-1.89		
	D3	Sqm	-2	0.75		2.10	-3.15		
	W	Sqm	-8	1.2		1.20	-11.52		
	Lintel	Sqm	-1	16.15		0.20	-3.23		
		Sqm	-1	7.9		0.20	-1.58		
	Basic rate							1196.00	
	Area weightage 10%							119.60	
	Total						**106.87**	**1315.60**	**140598.17**
13	Providing and constructing load bearing wall with Solid Concrete blocks of size 400x100x200mm having block density more than 1800kg/m3 and minimum compressive strength of 4.00 N/mm2 conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials, labour, scaffolding and curing, usage charges of machinery etc complete as per specifications. (Vol 2/ P No-17/ I no- 6.34 of PWD SR 2021-22)								
	Ground Floor								
	Along long direction	Sqm	3	3.4		3.25	33.15		
	Along Short direction	Sqm	3	1		3.25	9.75		
	Deduction								
	D2	Sqm	-1	0.90		2.10	-1.89		
	D3	Sqm	-2	0.75		2.10	-3.15		
	W	Sqm	-1	1.20		1.20	-1.44		
	V	Sqm	-2	0.75		0.60	-0.90		
	Basic Rate							940.00	
	Area weightage 10%							94.00	
	Total						**35.52**	**1034.00**	**36727.68**
14	Providing and constructing load bearing wall with Solid Concrete blocks of size 400x150x200mm having block density more than 1800kg/m3 and minimum compressive strength of 4.00 N/mm2 conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials, labour, scaffolding and curing, usage charges of machinery etc complete as per specifications. (Vol 2/ P No-17/ I no- 6.33 of PWD SR 2021-22)								
	Parapit Wall								
	Along long direction	Sqm	1	16.15		1.20	19.38		
	Along Short direction	Sqm	1	9.10		1.20	10.92		
	Basic Rate							1067.00	
	Area weightage 10%							106.70	
	Total						**30.30**	**1173.70**	**35563.11**

Sl No	Description of Item	Unit	No	L	B	D	Qty	Rate	Amount
15	Providing and laying Cement concrete flooring 40 mm thick with 20mm nominal size stone aggregate using 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement. including cement slurry complete.(PWD SR 2021-22 Vol -II Pg 59 item no 9.1)								
	Ground Floor								
		Sqm	1	15.55	8.70		135.29		
		Sqm	2	1.65	0.90		2.97		
	Deduction								
	Column	Sqm	-10	0.30	0.30		-0.90		
	Basic rate							400.00	
	Area weightage 10%							40	
	Total						**137.36**	**440.00**	**60436.20**
16	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) Mix 1:2:4 (M15) Using 20 mm nominal size graded crushed coarse aggregates(PWD SR 2021-22 Vol -I Pg 17 item no 2.4.1)								
	Ground Floor	Cum	1	15.55	8.7	0.1	13.53		
		Cum	2	1.65	0.9	0.1	0.30		
	Basic rate							5880.00	
	Area weightage 10%							588	
	Total						**13.83**	**6468.00**	**89423.33**
17	Construction of Embankment by excavating the available approved Gravel/Murrum deposited at a place or borrow pits during or prior excavation with all lifts and lead, transportation to site, spreading, grading to required slope and compacting to meet the requirement complete as per specifications, including cost of labour.rolling,water, all materials,usage& all other appurtenaces required to complete the work. (Vol I/ P No-7/ I no- 1.8 of PWD SR 2021-22)								
	Matti Area & Exercise Area	Cum	1	12.35	8.70	0.6	64.47		
								402.00	
	Basic rate							40.20	
	Area weightage 10%								
	Total						**64.47**	**442.20**	**28507.31**

Sl No	Description of Item	Unit	No	L	B	D	Qty	Rate	Amount
								Total Amount	2542289.55
								GST Charges (18% of estimated cost)	457612.1
								Miscellaneous and Rounding off	98.3
								Grand Total	3000000.00

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum.
4) The estimate is based on S.R of 2021-2022 and approved rates.

Assistant Engineer
BBMP

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ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ.
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Assistant Executive Engineer
BBMP

Executive Engineer
BBMP

Administrative Approval
Accorded For ...30.00 Lakh
Head of A/C...P-3796.....
CER NO :.....60..... Dt. 29/8/2022

TA

CE (YUK)

Accorded For 30.00 Lakh
Head of A/C..P-3796.....
CER NO :.....78..... Dt. 29/8/22

TA